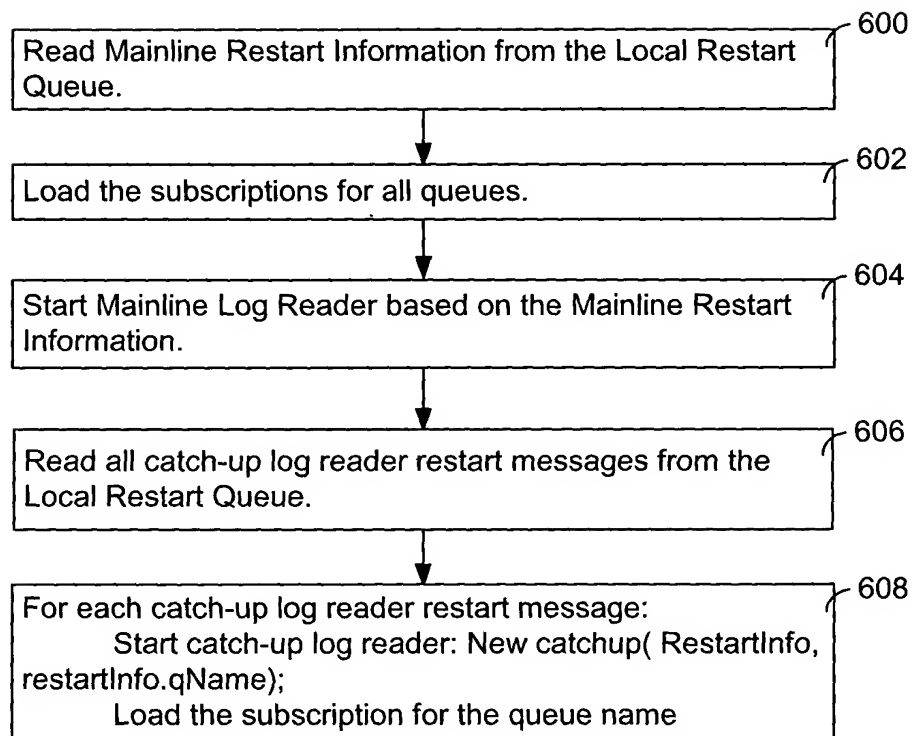


Fig. 1 Prior Art



Startup for a mainline log reader and at least one catch-up log reader

Fig. 13

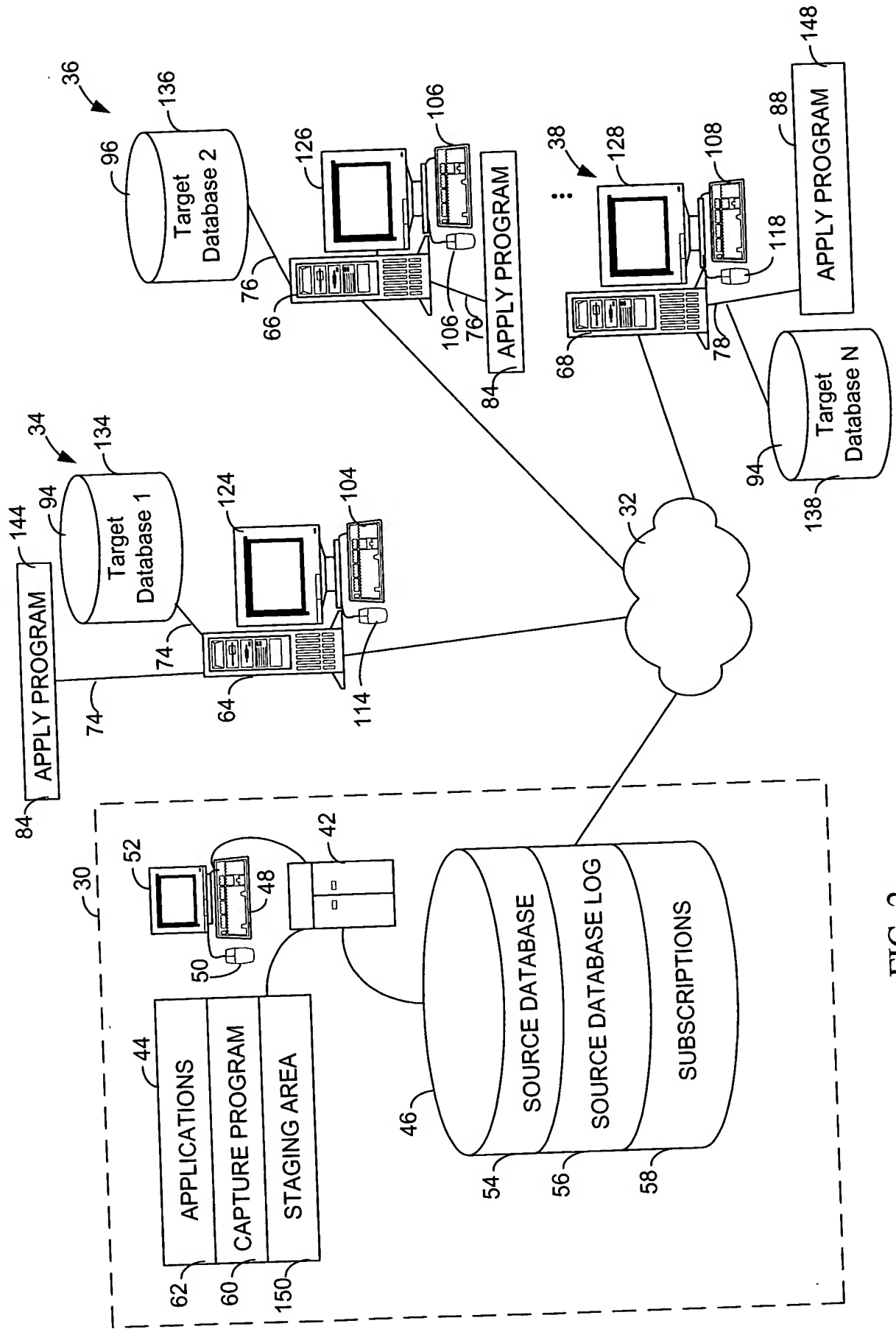


FIG. 2

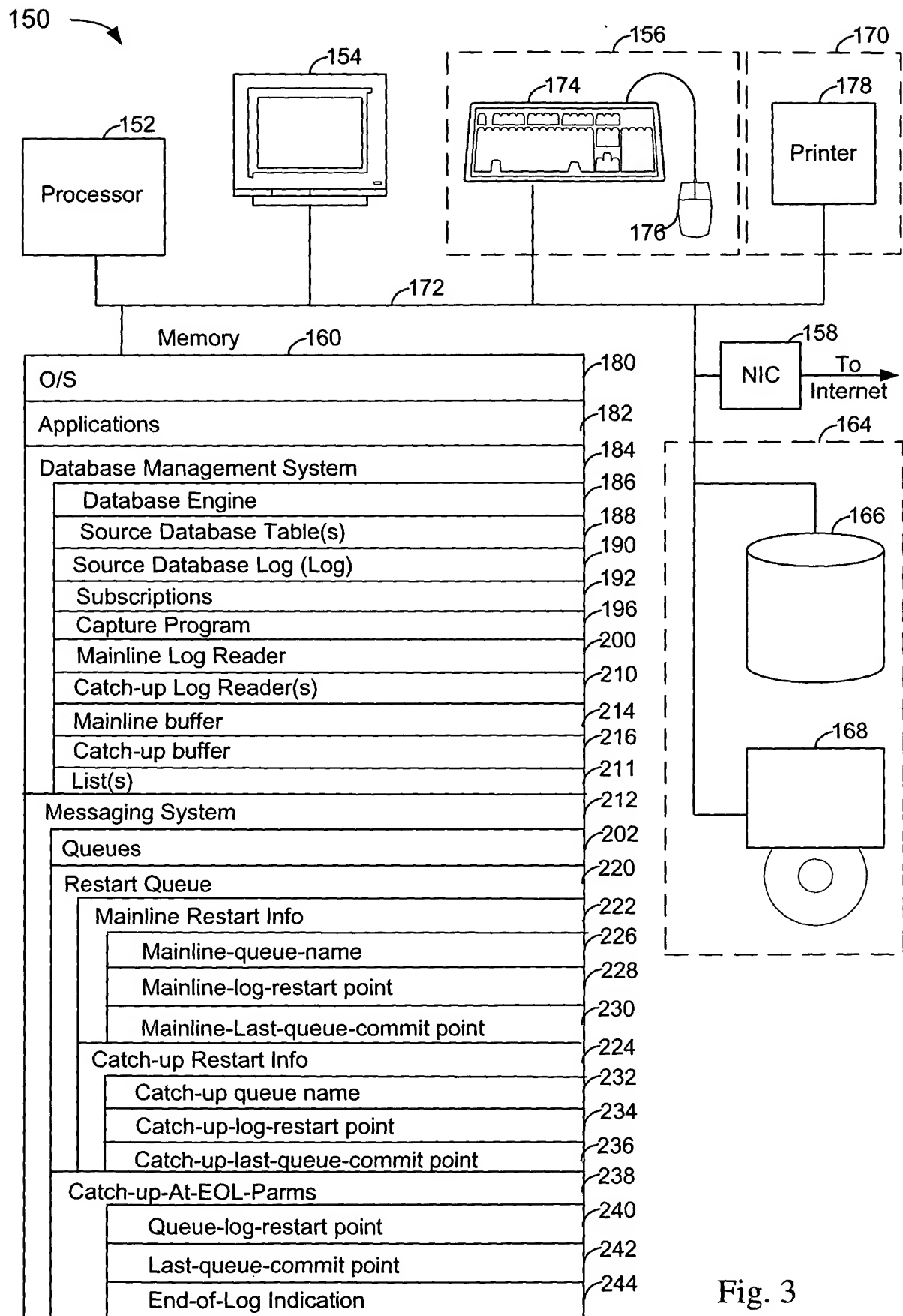


Fig. 3

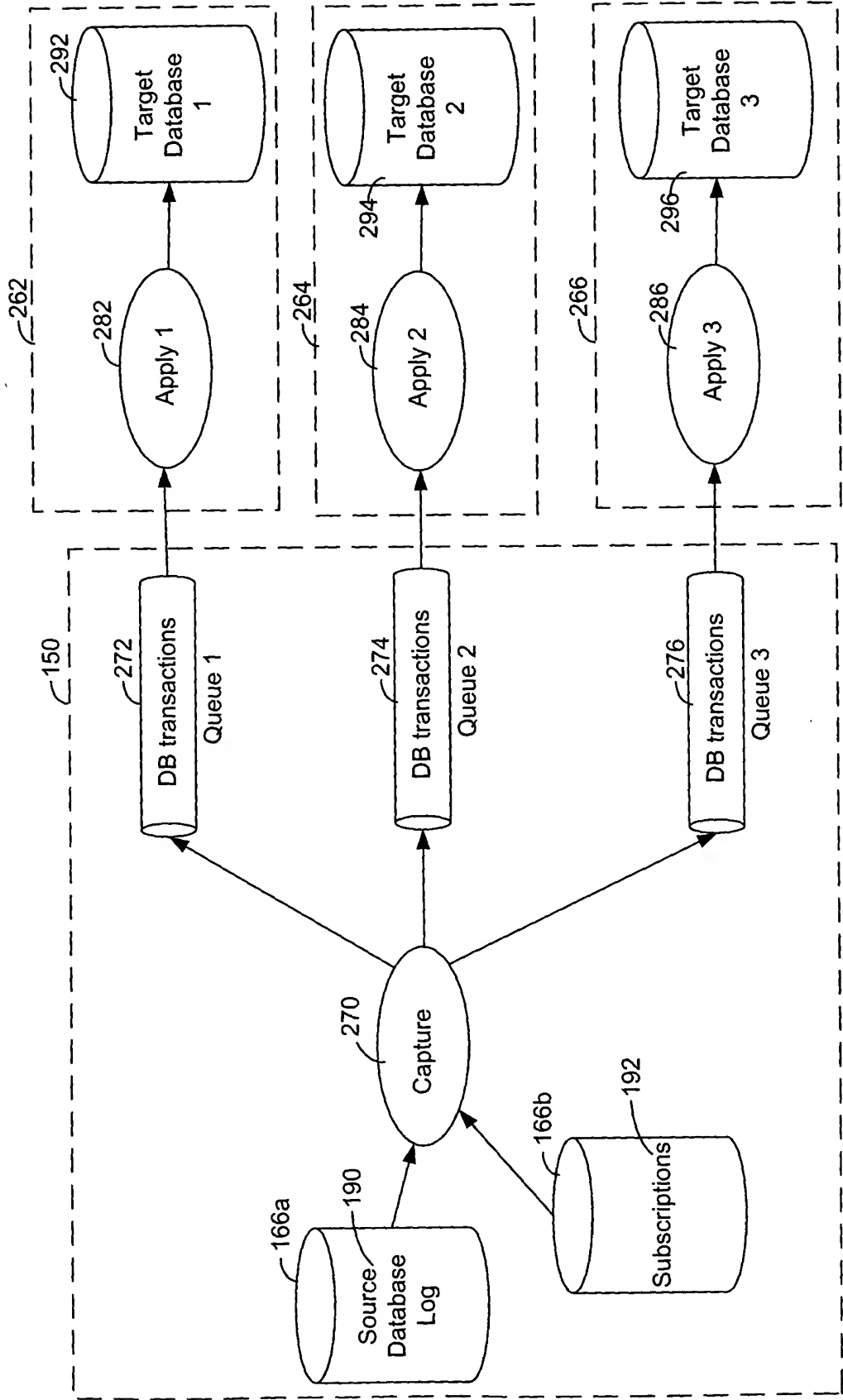


FIG. 4

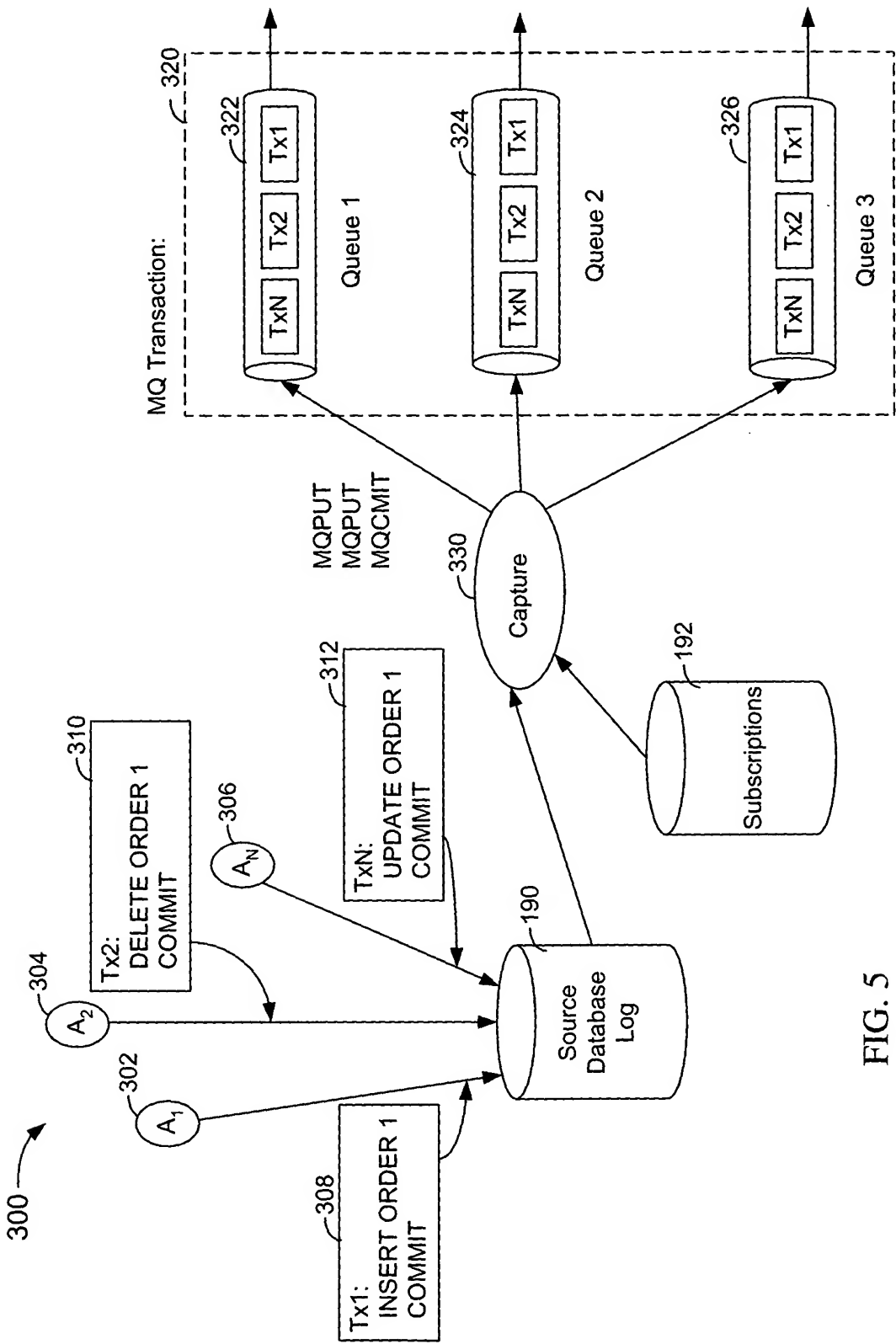


FIG. 5

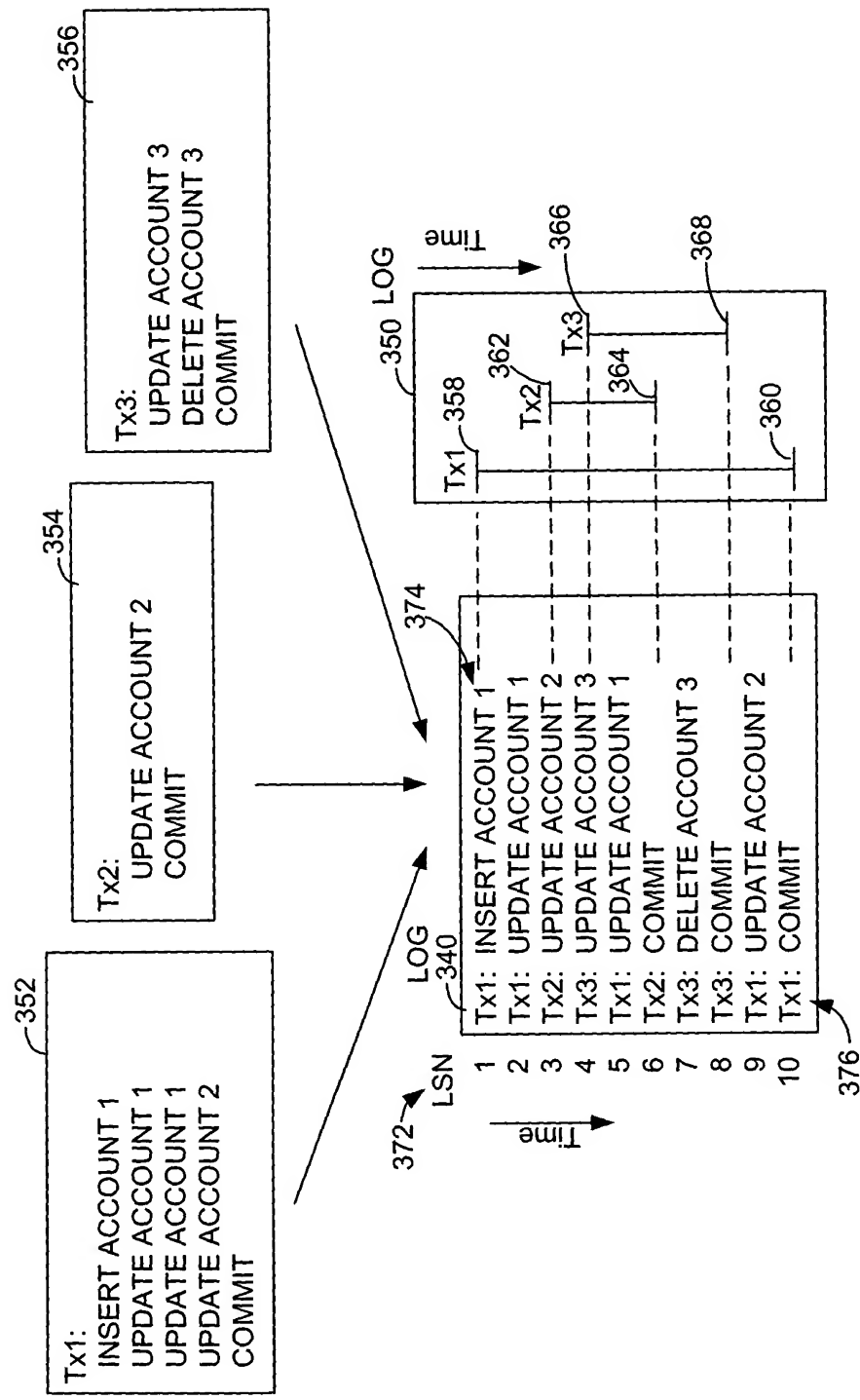


FIG. 6

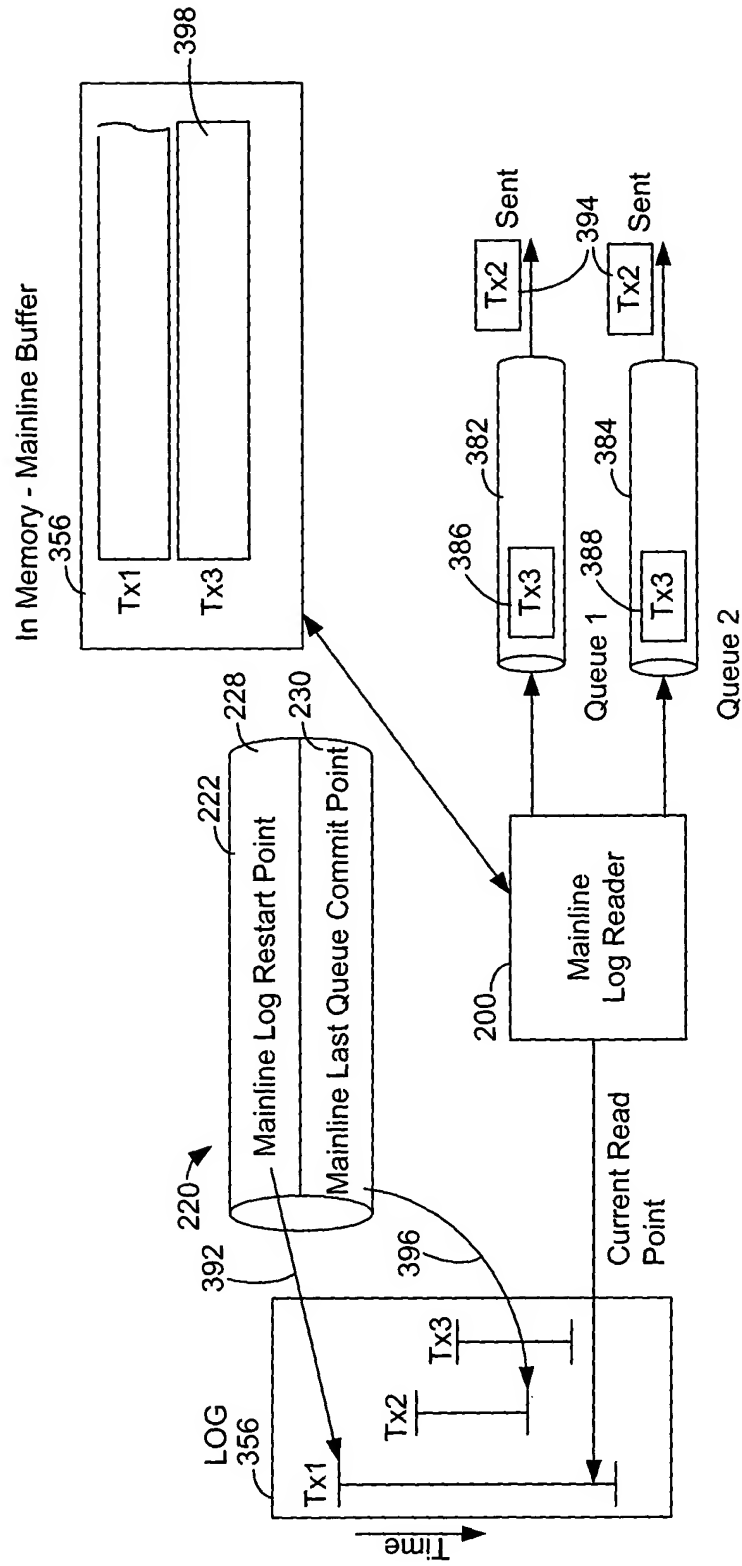


FIG. 7

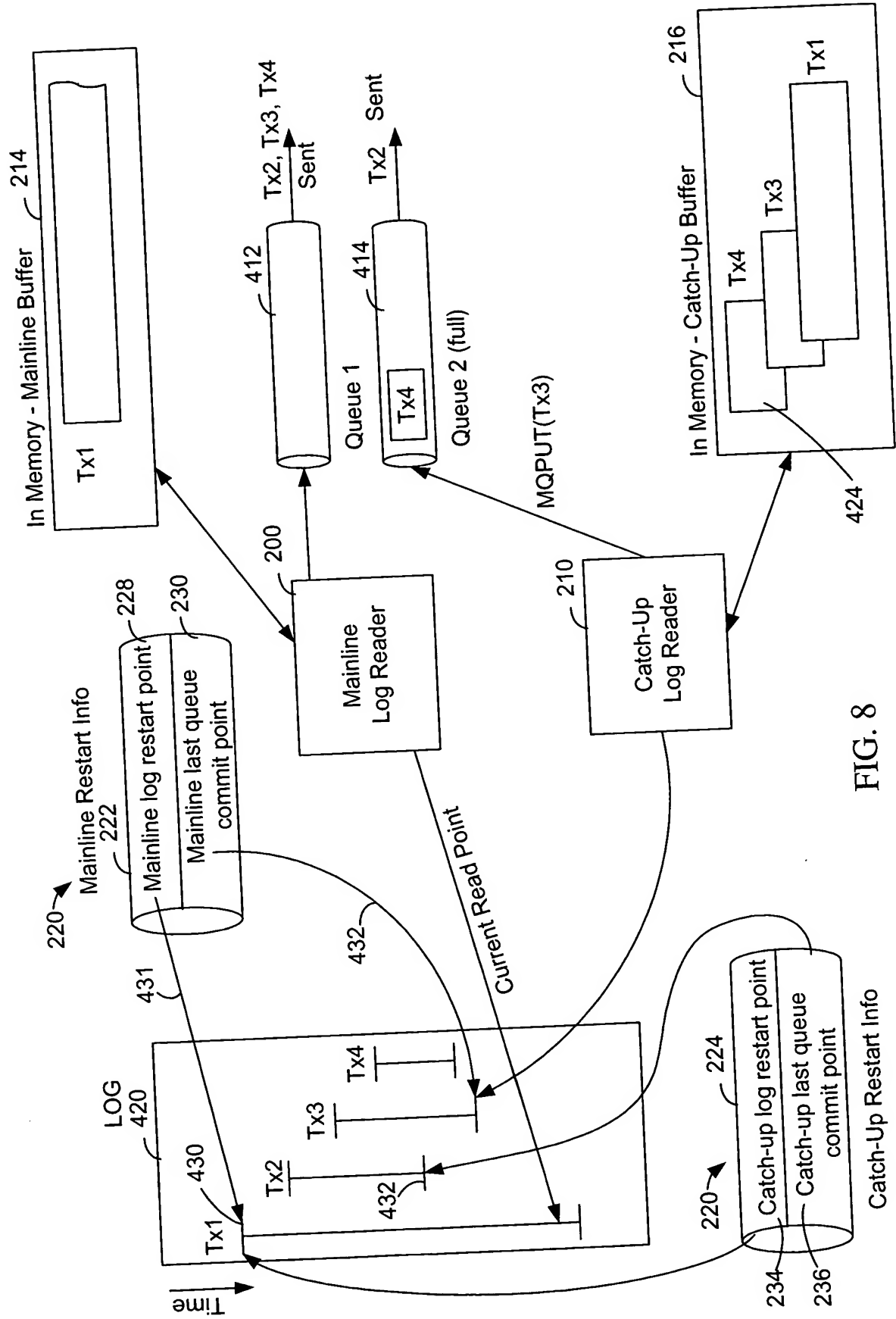


FIG. 8



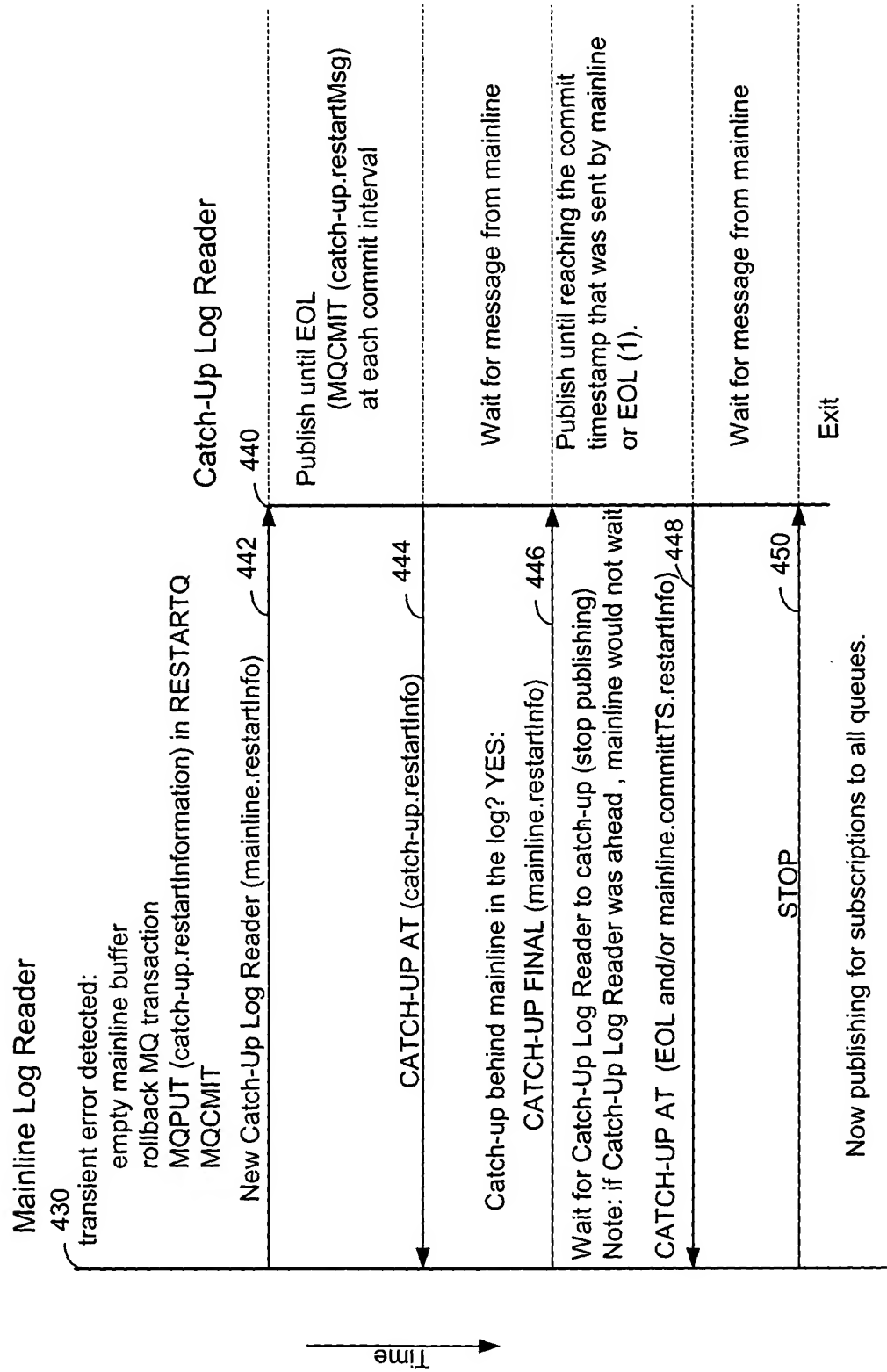


FIG. 9

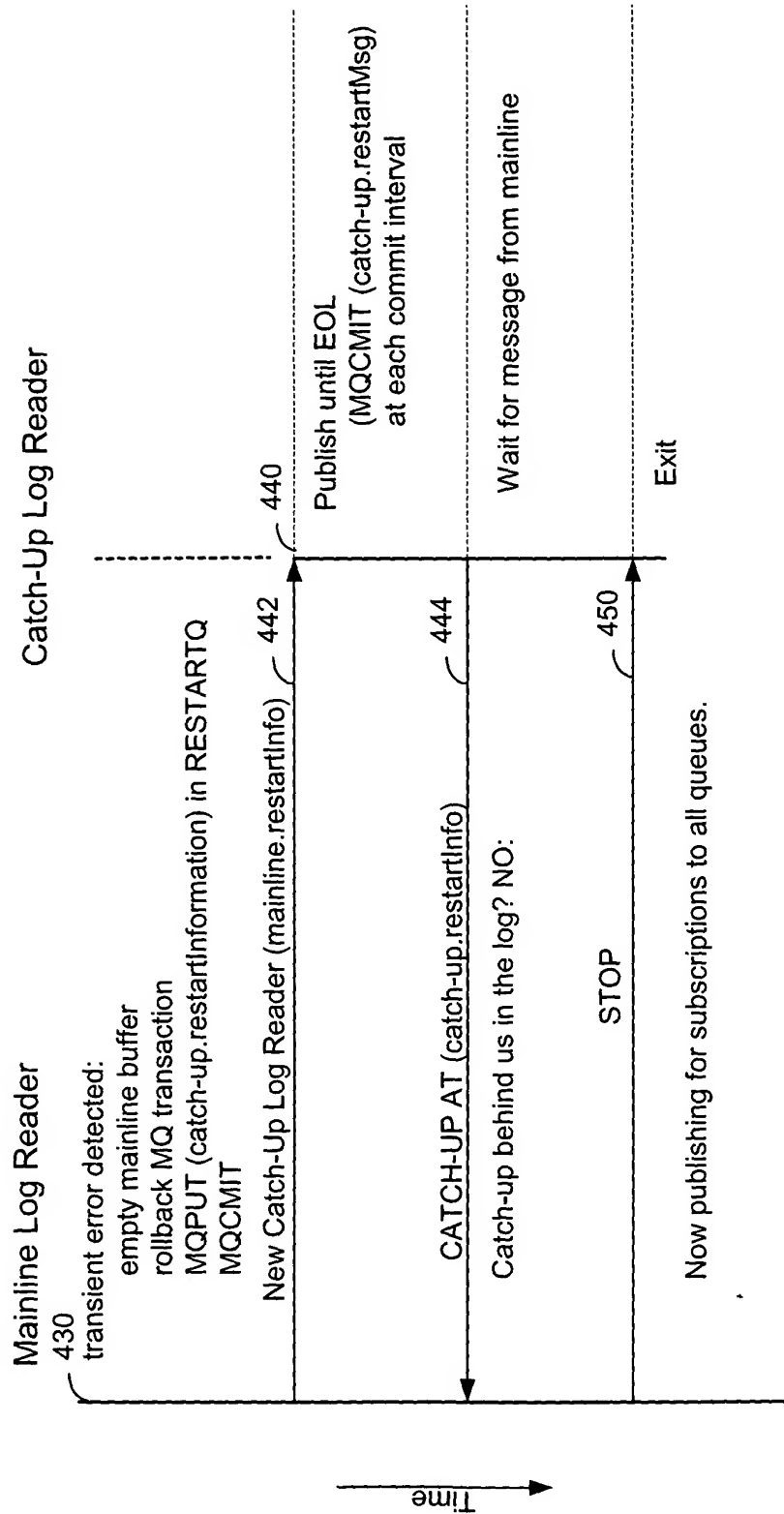
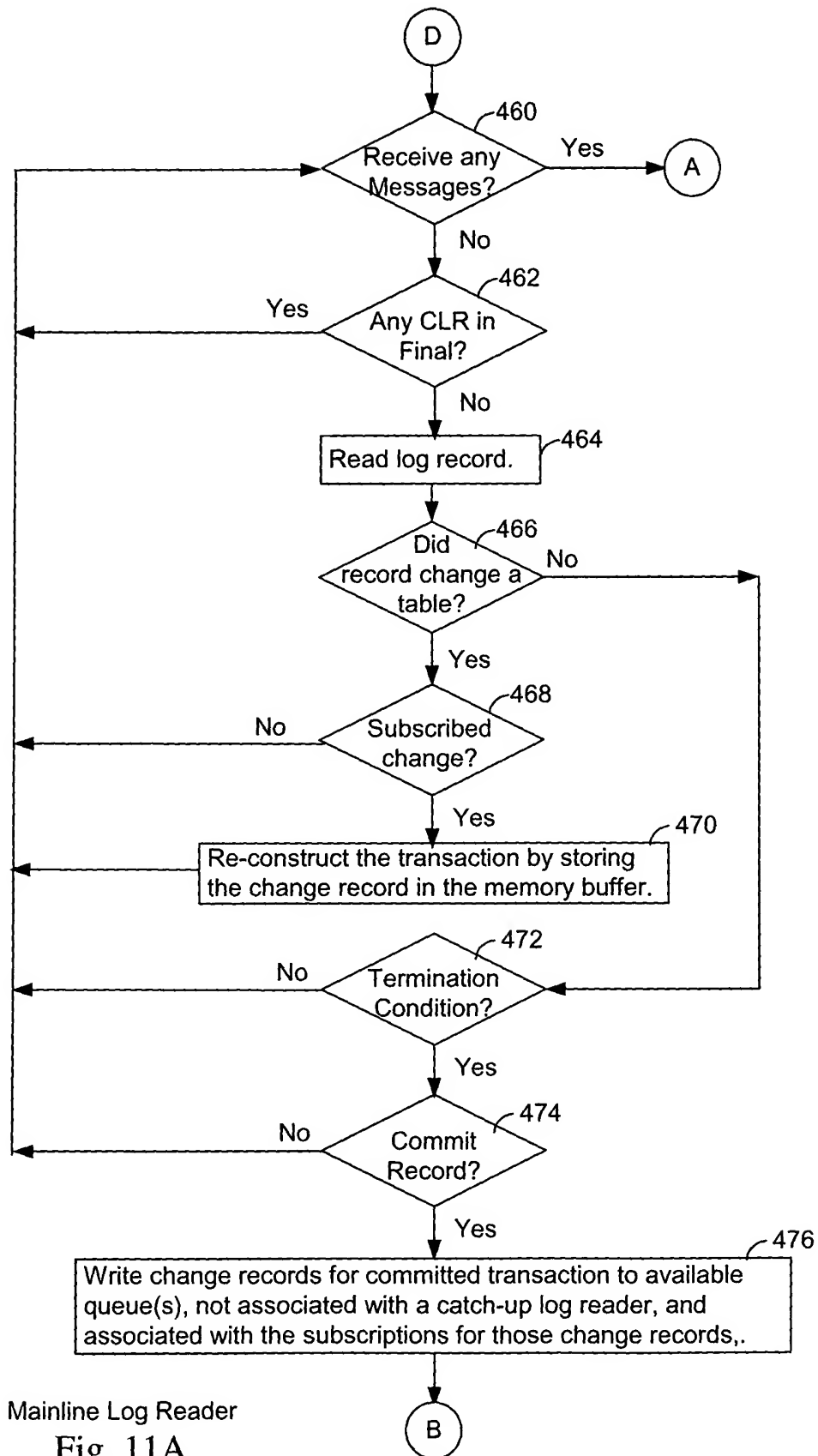
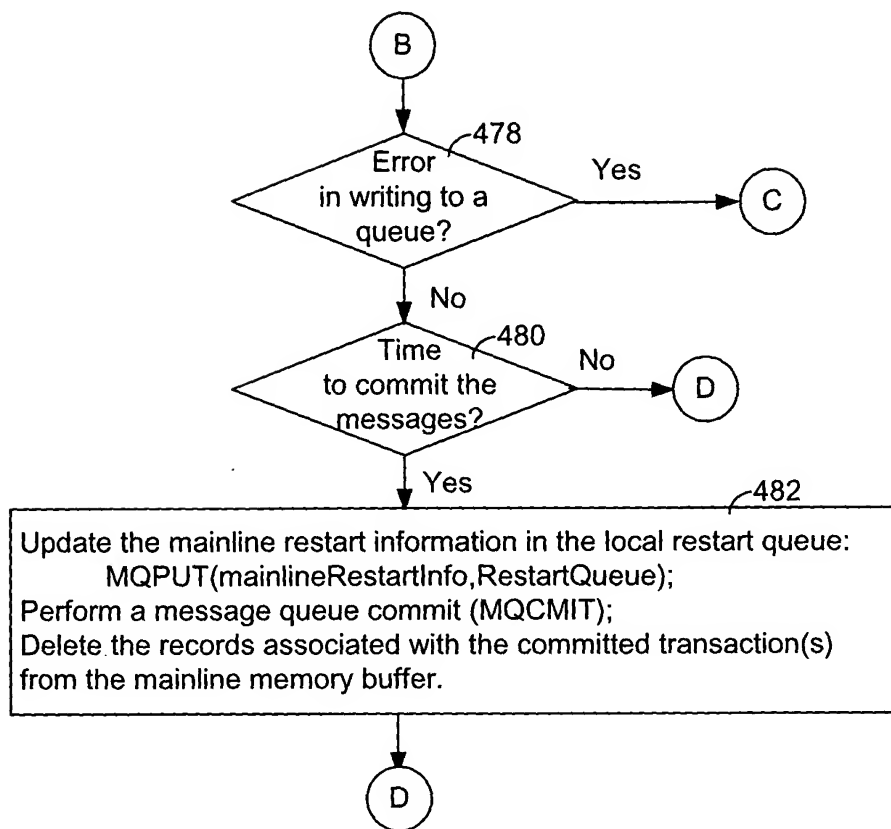


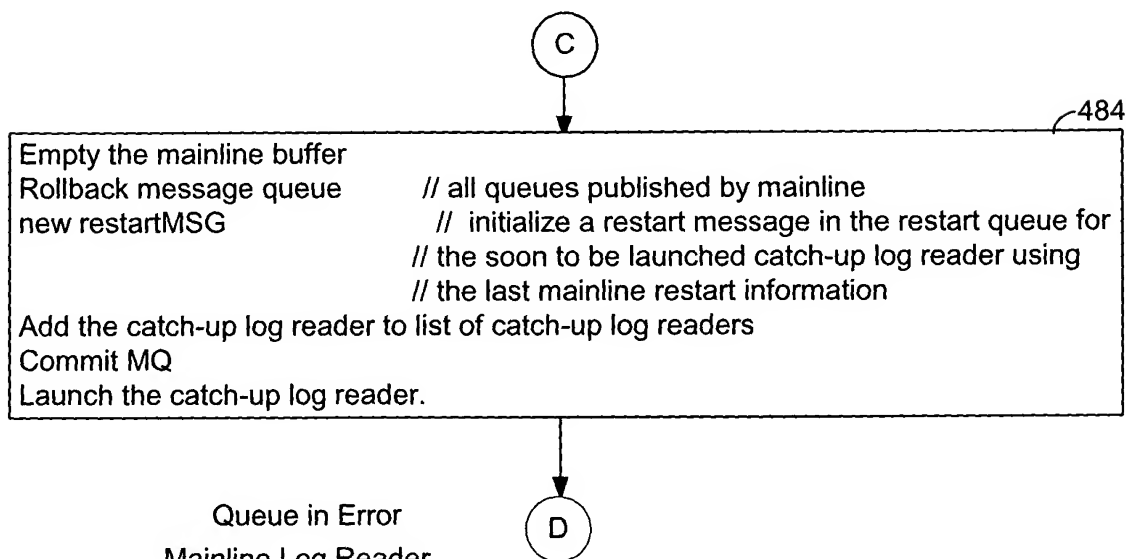
FIG. 10



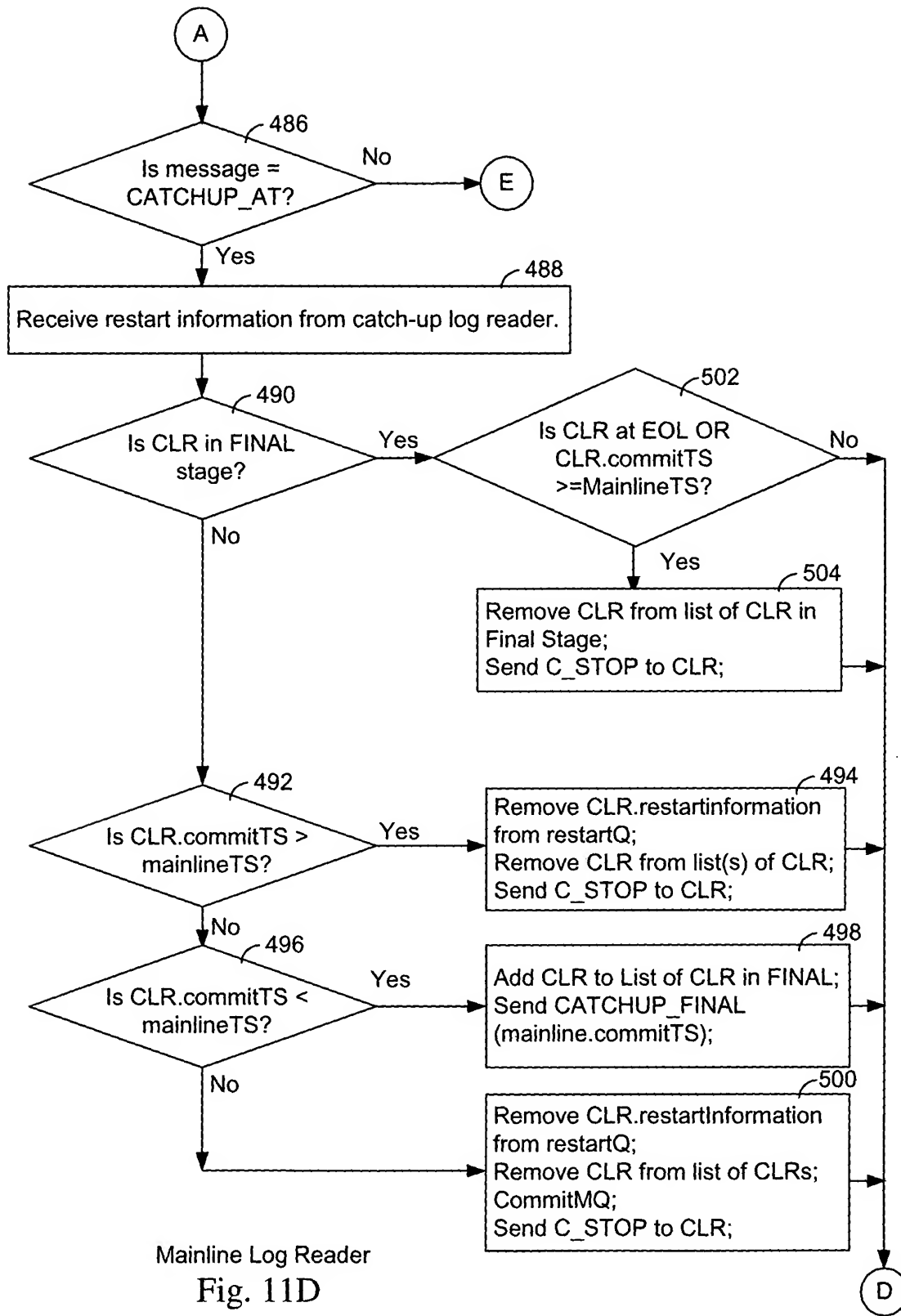
Mainline Log Reader  
Fig. 11A

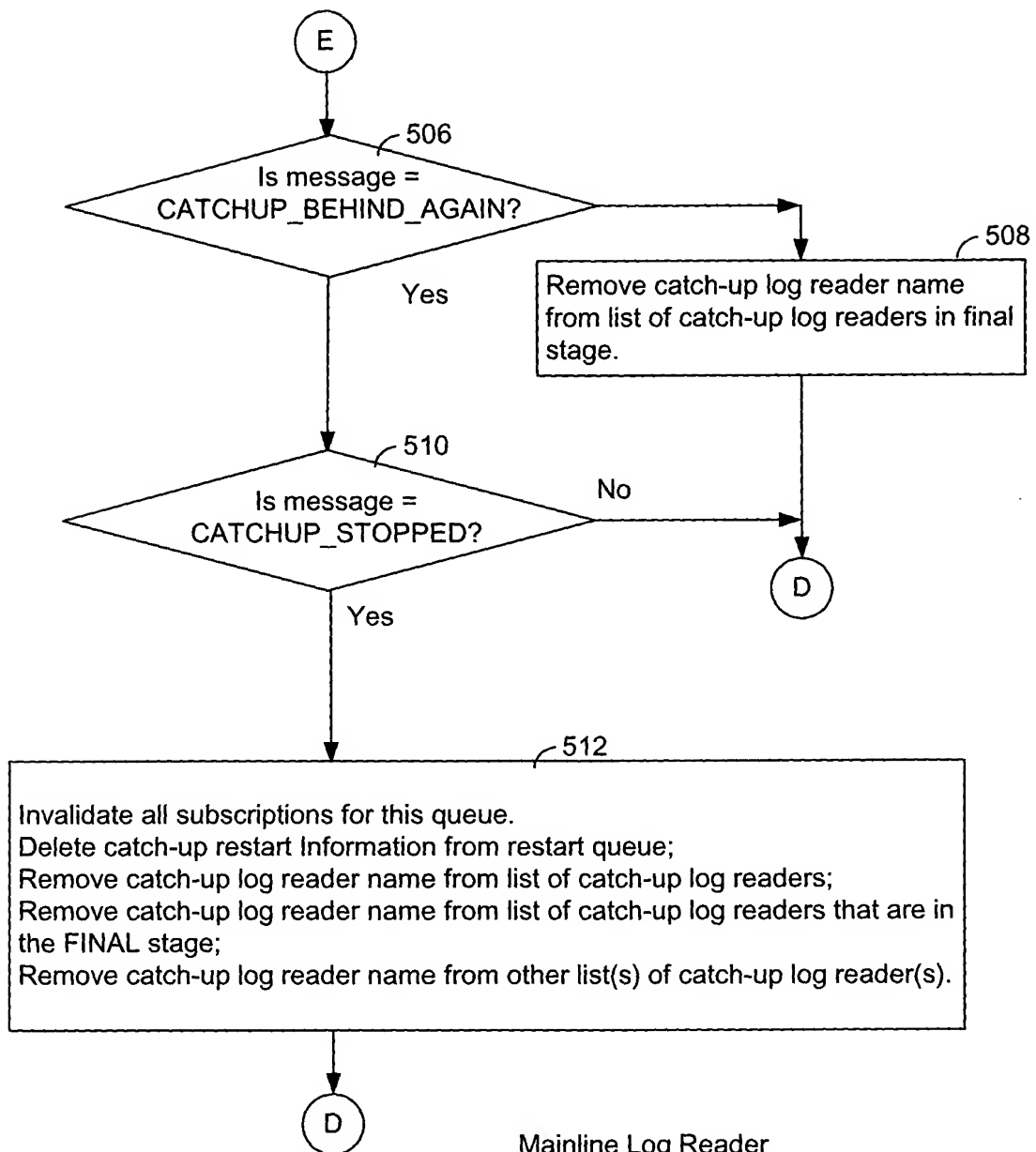


Mainline Log Reader  
Fig. 11B

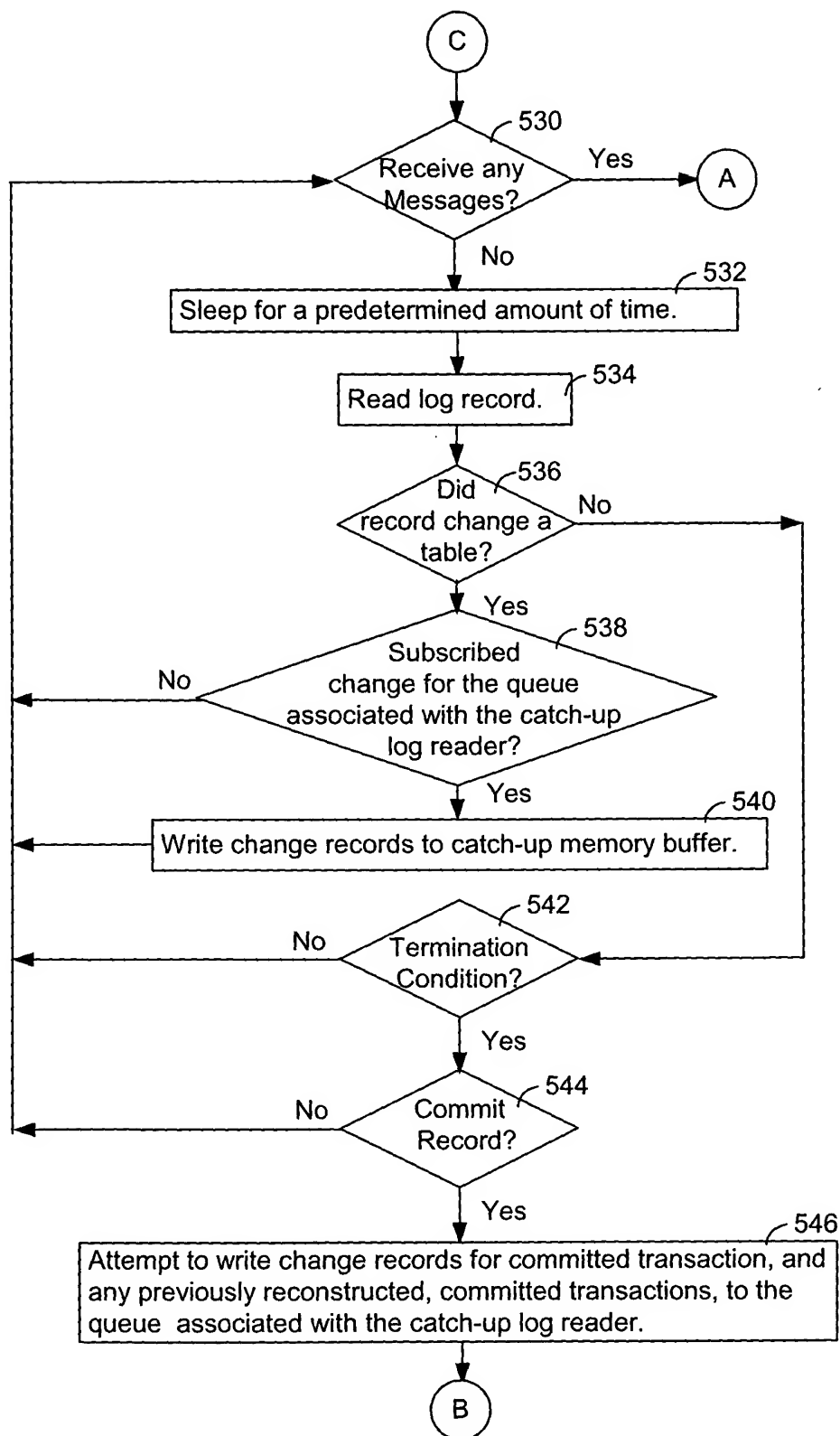


Queue in Error  
Mainline Log Reader  
Fig. 11C

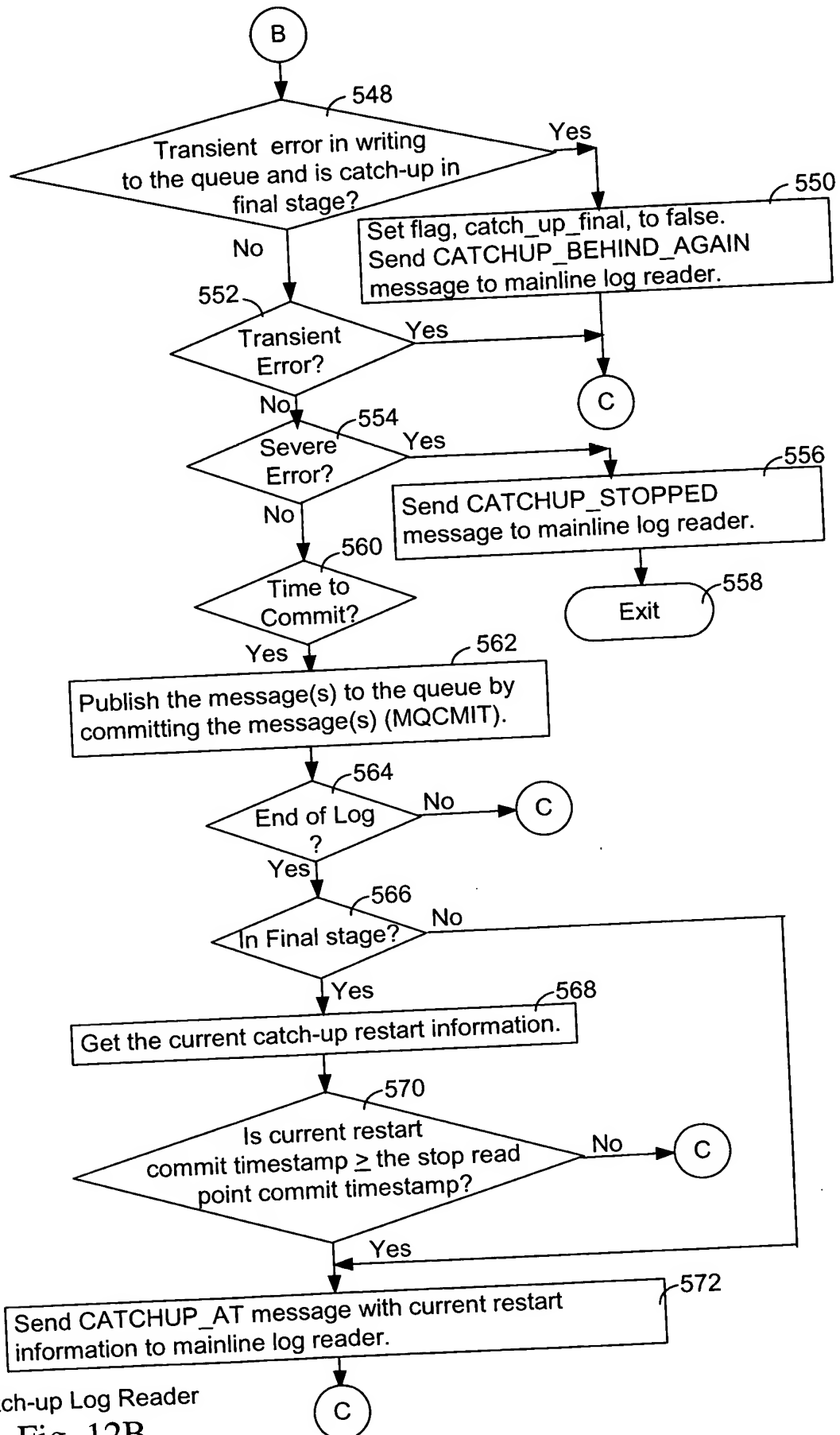




Mainline Log Reader  
Fig. 11E



Catch-up Log Reader  
Fig. 12A



Catch-up Log Reader  
Fig. 12B



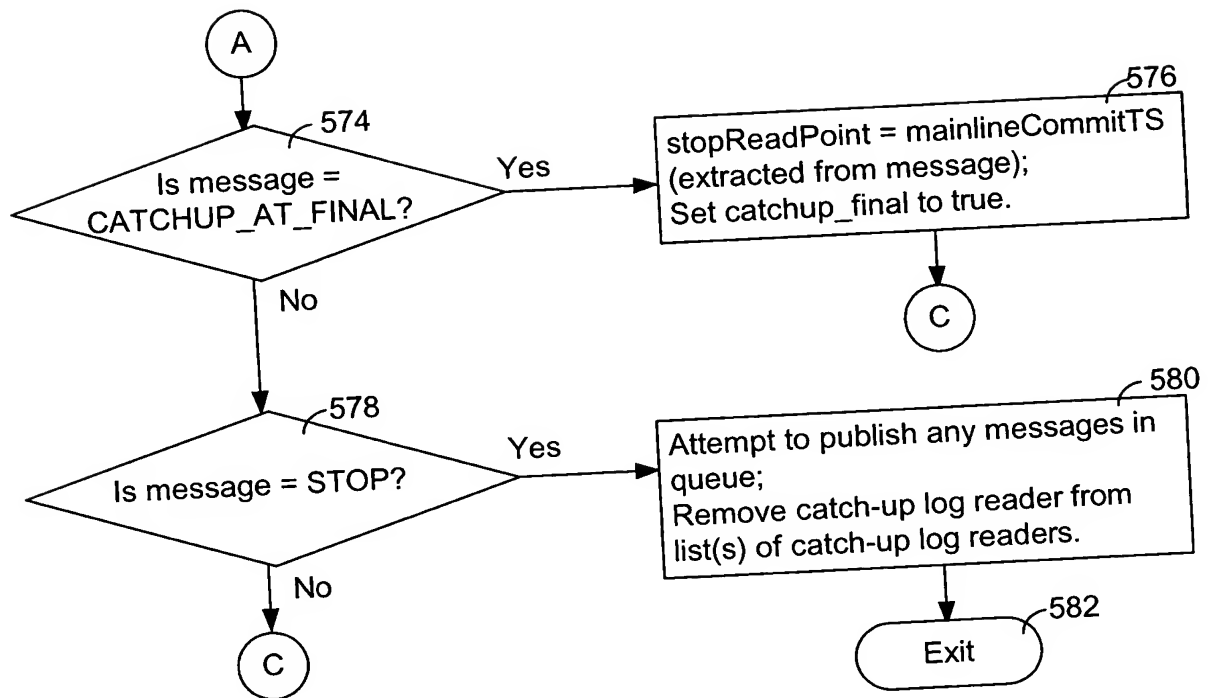


Fig. 12C